

IN THE SPECIFICATION

Please replace the paragraph beginning at page 18, line 6 with the following:

A memory agent according to the inventive principles of this patent may also be capable of intentionally generating an error such as a cyclical redundancy check (CRC) error in a status pattern. Such a technique may be useful as an alternative or supplemental way to distinguish a data pattern from a status pattern. For example, in some memory systems, each frame is sent along with a CRC code that is used to check the integrity of the data in the frame. According to the inventive principles of this patent, a memory agent may intentionally send the wrong CRC code with frame that contains a status pattern. The receiving agent may then interpret the frame as a status frame rather than a data frame. Some memory systems may utilize a path or paths having an extra bit lane to carry CRC data. If such a system is capable of operating in a fail-over mode, the agent or agents may only utilize an intentional CRC error if not operating in fail-over mode. As used herein, the term CRC refers not only to a cyclical redundancy check, but also to any other type of error checking scheme used to verify the integrity of a frame or pattern.

Please replace the paragraph beginning at page 19, line 4 with the following:

Fig. 20 illustrates an example of the first status pattern generated by the permuting pattern generator of Fig. 19. In this example, a frame is 12 transfers long. Figs. ~~21-22~~ 21-23 illustrate the second, third and forth status patterns, respectively. By using the same value on each bit lane during an entire frame, electromagnetic interference (EMI or noise) may be reduced.

Please replace the paragraph beginning at page 22, line 32 with the following:

In the example system, the host may send a continuous stream of zeros to hold all of the agents on the channel (in this example modules having buffers) in a first reset state indefinitely, for example while the host is held in reset by external conditions. The host may then send a stream of ones for a first amount of time, e.g., two frame periods, and then back to zeros to signal the other agents to execute a fast reset operation. Alternatively, the host may send a stream of ones for a second amount of time, e.g., more than two frame periods, to signal the other buffers to execute a full reset operation. A full reset may include various internal calibration operations such as impedance matching on the links, current source calibration in any receiver or drive circuitry, receiver offset cancellation, and the like. After

the calibration operations are performed, the host may then signal the buffers to transition to the fast reset operation.

Please replace the paragraph beginning at page 24, line 1 with the following:

At 148, the agent may disable all or a portion of its outer port. If the agent is a buffer or module, it may wait for a poll command from the host to transition to a hot reset operation at 150. If the agent is a host, it may disable all or a portion of its outer port and wait for a wake up command from a system environment. Upon receiving the wake up command, it may in turn enable all or a portion of its outer port and transition to a reset state.

Please replace the paragraph beginning at page 24, line 13 with the following:

At 154, the agent may drive zeros onto the three LSB outbound Tx bit lanes and place a bias current on the three LSB inbound Rx bit lanes to force the bits to zero ~~[[of]]~~ if they are not connected to an outer agent. The agent may then check the three LSB inbound Rx bit lanes, and if it detects at least two ones, it may decide at 155 that an outer agent is present and transition to a hot agent present operation at 156. Otherwise, the agent may decide at 155 that an outer agent is not present and transition back to the sleep operation at 148.